



MICHAEL S. REGAN

MICHAEL A. ABRACZINSKAS

XX XX, 2017

Royal Smith Executive VP-Operations Enviva Pellets Northampton, LLC 7200 Wisconsin Avenue, Suite 1000 Bethesda, Maryland 20814

SUBJECT: Air Quality Permit No. 10203T06

Facility ID: 6600167

Enviva Pellets Northampton, LLC

Garysburg, North Carolina Northampton County

Fee Class: Title V PSD Status: Major

Dear Mr. Smith

In accordance with your completed Air Quality Permit Application for a first time Title V permit received on April 22, 2014 and as amended on August 9, 2016, we are forwarding herewith Air Quality Permit No. 10203T06 to Enviva Pellets Northampton, LLC, located at 874 Lebanon Church Road, Garysburg, North Carolina authorizing the construction and operation, of the emission source(s) and associated air pollution control device(s) specified herein. Additionally, any emissions activities determined from your Air Quality Permit Application as being insignificant per 15A North Carolina Administrative Code 02Q .0503(8) have been listed for informational purposes as an "ATTACHMENT." Please note the requirements for the annual compliance certification are contained in General Condition P in Section 3. The current owner is responsible for submitting a compliance certification for the entire year regardless of who owned the facility during the year.

As the designated responsible official, it is your responsibility to review, understand, and abide by all of the terms and conditions of the attached permit. It is also your responsibility to ensure that any person who operates any emission source and associated air pollution control device subject to any term or condition of the attached permit reviews, understands, and abides by the condition(s) of the attached permit that are applicable to that particular emission source.

If any parts, requirements, or limitations contained in this Air Quality Permit are unacceptable to you, you have the right to request a formal adjudicatory hearing within 30 days following receipt of this permit, identifying the specific issues to be contested. This hearing request must be in the form of a written petition, conforming to NCGS (North Carolina General Statutes) 150B-23, and filed with both the Office of Administrative Hearings, 6714 Mail Service Center, Raleigh, North Carolina 27699-6714 and the Division of Air Quality, Permitting Section, 1641 Mail Service Center, Raleigh, North Carolina 27699-1641. The form for requesting a formal adjudicatory hearing may be obtained upon request from the Office of Administrative Hearings. Please note that this permit will be stayed in its entirety upon receipt of the request for a hearing. Unless a request for a hearing is made pursuant to NCGS 150B-23, this Air Quality Permit shall be final and binding 30 days after issuance.

Mr. Smith XX XX, 2017

You may request modification of your Air Quality Permit through informal means pursuant to NCGS 150B-22. This request must be submitted in writing to the Director and must identify the specific provisions or issues for which the modification is sought. Please note that this Air Quality Permit will become final and binding regardless of a request for informal modification unless a request for a hearing is also made under NCGS 150B-23.

The construction of new air pollution emission source(s) and associated air pollution control device(s), or modifications to the emission source(s) and air pollution control device(s) described in this permit must be covered under an Air Quality Permit issued by the Division of Air Quality prior to construction unless the Permittee has fulfilled the requirements of NCGS 143-215.108A(b) and received written approval from the Director of the Division of Air Quality to commence construction. Failure to receive an Air Quality Permit or written approval prior to commencing construction is a violation of NCGS 143-215.108A and may subject the Permittee to civil or criminal penalties as described in NCGS 143-215.114A and 143-215.114B.

The minor source baseline dates for PM10, SO2 and NOx have been triggered in Northampton County. For increment tracking purposes, no emission increase was noted during this modification.

This Air Quality Permit shall be effective from XXXX 2017 until XXXX, 2022 is nontransferable to future owners and operators, and shall be subject to the conditions and limitations as specified therein.

Should you have any questions concerning this matter, please contact Yuki Puram at (919) 707-8470 or yuki.puram@ncdenr.gov.

Sincerely yours,

William D. Willets, P.E., Chief, Permitting Section Division of Air Quality, NCDEQ

#### Enclosure

c: Heather Ceron, EPA Region 4 with review Raleigh Regional Office Central Files Connie Horne (cover letter only)

#### ATTACHMENT to Permit No. 10203T06

Insignificant Activities per 15A NCAC 02Q .0503(8)

Emission Source ID No.	<b>Emission Source Description</b>
IES-DWH	Dried wood handling
IES-PP	Pellet press system
IES-FPH	Finished product handling
IS-TK1 and IS-TK2	Two diesel storage tanks (2,500 gallon and 500 gallon capacity)
IES-EPWC	Electric powered green wood chipper
IES-RCHP-1 and IES-RCHP-2	Two electric powered wood re-chippers
IES-GWHS	Green wood handling and storage
IES-GWFB	Green wood fuel storage bin
IES-GN NSPS IIII, MACT ZZZZ	One emergency use generator (350 brake horsepower)
IES-FWP NSPS IIII, MACT ZZZZ	One fire water pump (300 brake horsepower)
IES-CHIP-1	Log Chipping

- 1. Because an activity is insignificant does not mean that the activity is exempted from an applicable requirement or that the Permittee is exempted from demonstrating compliance with any applicable requirement.
- 2. When applicable, emissions from stationary source activities identified above shall be included in determining compliance with the permit requirements for toxic air pollutants under 15A NCAC 02D .1100 "Control of Toxic Air Pollutants" or 02Q .0711 "Emission Rates Requiring a Permit."
- 3. For additional information regarding the applicability of MACT or GACT see the DAQ page titled "Specific Permit Conditions Regulatory Guide." The link to this site is as follows: <a href="http://deq.nc.gov/about/divisions/air-quality/air-quality-permits/specific-permit-conditions-regulatory-guide">http://deq.nc.gov/about/divisions/air-quality/air-quality-permits/specific-permit-conditions-regulatory-guide</a>.

# Summary of Changes to Permit

The following changes were made to the Enviva Pellets Northampton, LLC Air Permit No. 10203R05:

Page No.	Section	Description of Changes
Global	Global	<ul> <li>Changed the application number and complete date.</li> <li>Changed permit revision number to T06</li> <li>Changed the issuance/effective dates of the permit.</li> <li>Changed from the state permit format to the Title V permit format.</li> <li>Added noncompliance language to federally enforceable testing, monitoring and recordkeeping requirements.</li> </ul>
Cover Page	Cover Page	<ul><li> Updated the header and the footer.</li><li> Corrected the name of the city to Garysburg.</li></ul>
3	1. Emission source table	<ul> <li>Changed ES-DLH to ES-DLB and changed the description to "Dry line bin."</li> <li>Removed the bagging systems (ID Nos. ES-BSC-1, ES-BSS-1, ES-BSS-2, ES-BSC-2, ES-BSC-3, ES-BSB-1 and ES-BSB-2).</li> </ul>
4	2.1.A	<ul> <li>Removed the bagging system from the descriptions (ID Nos. ES-BSC-1, ES-BSS-1, ES-BSS-2, ES-BSC-2, ES-BSC-3, ES-BSB-1 and ES-BSB-2).</li> <li>Updated the VOC emission limit in the table.</li> </ul>
5	2.1.A.1.b	Added a testing requirement for the dryer (ID No. ES-Dryer) with the cyclone (ID No. CD-DC) and the wet electrostatic precipitator (ID No. CD-WESP).
5	2.1.A.1.c	<ul> <li>Changed the format of the monitoring/recordkeeping sections.</li> <li>Added a condition to operate the wet electrostatic precipitator (ID No. CD-WESP) with all three fields.</li> <li>Removed the PM control requirements for the bagging systems (ID Nos. ES-BSC-1, ES-BSS-1, ES-BSS-2, ES-BSC-2, ES-BSC-3, ES-BSB-1 and ES-BSB-2).</li> </ul>
5-6	2.1.A.1.d through h	Separated the recordkeeping requirements from the monitoring requirements.
6	2.1.A.1.g	Changed the inspections and maintenance requirements to be more specific.
6	2.1.A.1.j	Added a semi-annual reporting requirement.
7	2.1.A.3.b	Added a testing requirement for the dryer (ID No. ES-Dryer) with the cyclone (ID No. CD-DC) and the wet electrostatic precipitator (ID No. CD-WESP).
8	2.1.A.3.f	Added a semi-annual reporting requirement.
8	2.2.A.1.b	Added a testing condition to establish a VOC emission factor when the facility operates at a higher softwood content.
8-9	2.2.A.1.d	<ul> <li>Reworded the monitoring/recordkeeping requirements.</li> <li>Inserted a table specifying emission factors and the maximum softwood content.</li> </ul>
9	2.2.A.1.e	Reworded the reporting requirements.
10	2.2.A.2.c	Added monitoring/recordkeeping requirements.
10	2.2.A.3	Added permit language to be consistent with other TV permits under this regulation.
12-22	3	Updated to the most recent version of general conditions (version 5.1 08/03/2017)



# State of North Carolina Department of Environmental Quality Division of Air Quality

# AIR QUALITY PERMIT

Permit No.	Replaces Permit No.(s)	Effective Date	Expiration Date
10203T06	10203R05	XXXX	XXXX

Until such time as this permit expires or is modified or revoked, the below named Permittee is permitted to construct and operate the emission source(s) and associated air pollution control device(s) specified herein, in accordance with the terms, conditions, and limitations within this permit. This permit is issued under the provisions of Article 21B of Chapter 143, General Statutes of North Carolina as amended, and Title 15A North Carolina Administrative Codes (15A NCAC), Subchapters 02D and 02Q, and other applicable Laws.

Pursuant to Title 15A NCAC, Subchapter 02Q, the Permittee shall not construct, operate, or modify any emission source(s) or air pollution control device(s) without having first submitted a complete Air Quality Permit Application to the permitting authority and received an Air Quality Permit, except as provided in this permit.

Permittee: Enviva Pellets Northampton, LLC

Facility ID: 6600167

Facility Site Location: 874 Lebanon Church Road

City, County, State, Zip: Garysburg, Northampton County, North Carolina, 27831

Mailing Address: 7200 Wisconsin Avenue, Suite 1000

City, State, Zip: Bethesda, Maryland, 20814

Application Number: 6600167.14B

Complete Application Date: April 22, 2014 – Amended August 9, 2016

Primary SIC Code: 2499

Division of Air Quality, Raleigh Regional Office Regional Office Address: 3800 Barrett Drive

Raleigh, North Carolina, 27609

Permit issued this the XX day of XXXXX, XXXX

William D. Willets, P.E., Chief, Air Permitting Section By Authority of the Environmental Management Commission

# Table of Contents

SECTION 1: PERMITTED EMISSION SOURCE (S) AND ASSOCIATED

AIR POLLUTION CONTROL DEVICE (S) AND APPURTENANCES

SECTION 2: SPECIFIC LIMITATIONS AND CONDITIONS

- 2.1 Emission Source(s) Specific Limitations and Conditions (Including specific requirements, testing, monitoring, recordkeeping, and reporting requirements)
- 2.2 Multiple Emission Source(s) Specific Limitations and Conditions (Including specific requirements, testing, monitoring, recordkeeping, and reporting requirements)

SECTION 3: GENERAL PERMIT CONDITIONS

ATTACHMENT List of Acronyms

# SECTION 1 - PERMITTED EMISSION SOURCE (S) AND ASSOCIATED AIR POLLUTION CONTROL DEVICE (S) AND APPURTENANCES

The following table contains a summary of all permitted emission sources and associated air pollution control devices and appurtenances:

<b>Emission Source</b>	Emission Source	Control Device	
ID No.	Description	ID No.	Control Device Description
ES-DRYER	Direct heat, wood-fired dryer	CD-DC	One simple cyclone (205 inches in
	(174 million Btu per hour	and	diameter) in series with
	heat input, 71.71 ODT*/hr)	CD-WESP	one wet electrostatic precipitator
			(29,904 square feet of total collection
			plate area)
ES-DLB	Dry line bin	N/A	N/A
ES-HM-1	Three hammermills	CD-HM-CYC-1	Three simple cyclones (120 inches in
ES-HM-2		through 3,	diameter each) in series with a fabric
ES-HM-3		CD-HM-BF-1	filter (6,250 square feet of filter area)
ES-HM-4	Three hammermills	CD-HM-CYC-4	Three simple cyclones (120 inches in
ES-HM-5		through 6,	diameter each) in series with a fabric
ES-HM-6		CD-HM-BF-2	filter (6,250 square feet of filter area)
ES-HM-7	Two hammermills	CD-HM-CYC-7	Two simple cyclones (120 inches in
ES-HM-8		and 8,	diameter each) in series with a fabric
		CD-HM-BF-3	filter (6,250 square feet of filter area)
ES-NDS	Nuisance dust system and dry	CD-HM-BF-3	One fabric filter (6,250 square feet of
ES-DLC-1	line feed conveyor		filter area)
ES-PMFS	Pellet feed mill silo	CD-PMFS-BV	One bin vent filter (377 square feet of
			filter area)
ES-PFB-1	Pellet fines bin	CD-PFB-BV	One bin vent filter (780 square feet of
			filter area)
ES-CLR1,	Pellet coolers	CD-CLR-1	Six high efficiency cyclones (54 inches
through		through	in diameter each)
ES-CLR-6		CD-CLR-6	
ES-FPH	Finished product handling	CD-FPH-BF	One fabric filter (4,842 square feet of
ES-PB-1 through	Twelve (12) pellet load-out		filter area)
ES-PB-12	bins		
ES-PL-1	Pellet mill load-out 1 and 2		
ES-PL-2			

\*ODT: Oven Dried Ton

### **SECTION 2 - SPECIFIC LIMITATIONS AND CONDITIONS**

# 2.1 Emission Source(s) and Control Devices(s) Specific Limitations and Conditions

The emission source(s) and associated air pollution control device(s) and appurtenances listed below are subject to the following specific terms, conditions, and limitations, including the testing, monitoring, recordkeeping, and reporting requirements as specified herein:

A. Wood-fired dryer system (ID No. ES-DRYER) with associated cyclone and wet electrostatic precipitator (ID Nos. CD-DC and CD-WESP);

Dry line bin (ID No. ES-DLB);

Hammermills (ID Nos. ES-HM-1 through ES-HM-8) with associated cyclones (ID Nos. CD-HM-CYC-1 through CD-HM-CYC-8) and fabric filters (ID Nos. CD-HM-BF-1 through CD-HM-BF3);

Nuisance dust system (ID No. ES-NDS) and dry line feed conveyor (ID No. ES-DLC-1) with associated fabric filter (ID No. CD-HM-BF-3);

Pellet mill feed silo (ID No. ES-PMFS) with associated bin vent filter (ID No. CD-PMFS-BV);

Pellet fines bin (ID No. ES-PFB-1) with associated fabric filter (ID No. CD-PFB-BV);

Pellet coolers (ID Nos. ES-CLR1 through ES-CLR6) with associated cyclones (ID Nos. CD-CLR-1 through CD-CLR-6); and

Finished product handling (ID No. ES-FPH), pellet load-out bins (ID Nos. ES-PB-1 through ES-PB-12), and pellet mill load-out (ID Nos. ES-PL-1 and ES-PL-2) with associated fabric filter (ID No. CD-FPH-BF)

The following table provides a summary of limits and standards for the emission source(s) described above:

Regulated Pollutant	Limits/Standards	Applicable Regulation	
Particulate matter	$E = 4.10 \text{ x P}^{0.67}$ for process weight rate < 30 tph	15A NCAC 02D .0515	
	$E = 55 \text{ x P}^{0.11} - 40 \text{ for process weigh rate} \ge 30 \text{ tph}$		
	Where, $E =$ allowable emission rate (lb/hr)		
	P = process weight rate (tph)		
Sulfur dioxide	For Dryer System (ID No. ES-DRYER)	15A NCAC 02D .0516	
	2.3 pounds per million Btu heat input		
Visible emissions	20 percent opacity when averaged over a six minute	15A NCAC 02D .0521	
	period		
Volatile organic	See Section 2.2.A.1	15A NCAC 02Q .0317 for	
compounds		avoidance of 15A NCAC 02D	
		.0530	
Toxic air	See Section 2.2 A.2	15A NCAC 02D .1100	
pollutants			
Toxic air	See Section 2.2 A.3	15A NCAC 02Q .0711	
pollutants			

#### 1. 15A NCAC 02D .0515: PARTICULATES FROM MISCELLANEOUS INDUSTRIAL PROCESSES

a. Emissions of particulate matter from these sources (ID Nos. ES-DRYER, ES-DLB, ES-HM-1 through ES-HM-8, ES-NDS, ES-DLC-1, ES-PMFS, ES-PFB-1, ES-CLR1 through ES-CLR6, ES-FPH, ES-PB-1 through PB-12 and ES-PL-1 and ES-PL-2) shall not exceed an allowable emission rate as calculated by the following equation:

 $E = 4.10 \text{ x P}^{0.67}$  for process weight rate < 30 tph

 $E = 55 \times P^{0.11} - 40$  for process weight rate  $\geq 30$  tph

Where E = allowable emission rate in pounds per hour

P = process weight in tons per hour

Liquid and gaseous fuels and combustion air are not considered as part of the process weight.

#### **Testing** [15A NCAC 02Q .0508(f)]

- b. Under the provisions of NCGS 143-215.108, the Permittee shall demonstrate compliance with the emission limit(s) above by testing the wood fired dryer (ID No. ES-Dryer) controlled by the cyclone (ID No. CD-DC) and the wet electrostatic precipitator (ID No. CD-WESP) for particulate emissions in accordance with a testing protocol approved by the DAQ. Details of the emissions testing and reporting requirements can be found in General Condition JJ. In addition, the Permittee shall submit a testing protocol to the DAQ's Permitting Section to request an approval to ensure the performance test being representative of the wet electronic precipitator at the minimum operating/monitoring parameters as required in Section 2.1.A.1.f. Testing shall be completed and the results submitted within 90 days unless an alternate date is approved by the DAQ. If the test results show above the limit given in Section 2.1 A.1.a above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0515.
- c. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1.A.1.a above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0515.

# Monitoring [15A NCAC 02Q .0508(f)]

- d. Particulate matter emissions shall be controlled as follows:
  - i. Particulate matter emissions from the wood dryer system (**ID No. ES-DRYER**) shall be controlled by a simple cyclone (**ID No. CD-DC**) in series with a wet electrostatic precipitator (**ID No. CD-WESP**).
  - ii. The wet electrostatic precipitator (**ID No. CD-WESP**) shall be operated with all three fields, excluding periods when one of the three fields is in a wash cycle.
  - iii. Particulate matter emissions from the three hammermills (ID Nos. ES-HM-1 through ES-HM-3) shall be controlled by three simple cyclones (ID Nos. CD-HM-CYC-1 through CD-HM-CYC-3) in series with a fabric filter (ID No. CD-HM-BF-1).
  - iv. Particulate matter emissions from the three hammermills (ID Nos. ES-HM-4 through ES-HM-6) shall be controlled by three simple cyclones (ID Nos. CD-HM-CYC-4 through CD-HM-CYC-6) in series with a fabric filter (ID No. CD-HM-BF-2).
  - v. Particulate matter emissions from the two hammermills (**ID Nos. ES-HM-7 and ES-HM-8**) shall be controlled by two simple cyclones (**ID Nos. CD-HM-CYC-7 and CD-HM-CYC-8**) in series with a fabric filter (**ID No. CD-HM-BF-3**).
  - vi. Particulate matter emissions from the pellet mill feed silo (**ID No. ES-PMFS**) shall be controlled by a bin vent filter (**ID No. CD-PMFS-BV**).
  - vii. Particulate matter emissions from the pellet coolers (**ID Nos. ES-CLR-1 through ES-CLR-6**) shall be controlled by six high efficiency cyclones (**ID Nos. CD-CLR-C1 through CD-CLR-C6**).
  - viii.Particulate matter emissions from the finished product handling (ID No. ES-FPH), pellet load-out bins (ID Nos. ES-PB-1 through ES-PB-12), and pellet mill load-outs (ID Nos. ES-PL-1 and ES-PB-2) shall be controlled by a fabric filter (ID No. CD-FPH-BF).

#### For bagfilters and/or cyclones:

- e. To ensure compliance, the Permittee shall perform inspections and maintenance as recommended by the manufacturer. In addition to the manufacturer's inspection and maintenance recommendations, or if there are no manufacturer's inspection and maintenance recommendations, as a minimum, the inspection and maintenance requirement shall include the following:
  - i. a monthly visual inspection of the system ductwork and material collection unit for leaks.
  - ii. an annual (for each 12 month period following the initial inspection) internal inspection of the bagfilters' structural integrity.

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0515 if the ductwork, cyclones

and bagfilter are not inspected and maintained.

#### *For wet electrostatic precipitator:*

- f. During the stack test for the wet electrostatic precipitator (ID No. CD-WESP) as required in Section 2.1. A.1.b, the Permittee shall collect data to establish minimum secondary voltage and minimum current to meet the limits in Section 2.1.A.1.a and 2.1.A.3.a. Within 30 days of test results submittal, the Permittee shall operate the precipitator above the minimum parameters established during the performance test. The Permittee then shall request a permit revision to include the minimum secondary voltage and minimum current within 30 days of receipt of certification of the testing by the stationary source compliance branch. If these requirements are not met, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0515.
- g. To ensure compliance, the Permittee shall perform inspections and maintenance as recommended by the manufacturer. In addition to the manufacturer's inspection and maintenance recommendations, or if there are no manufacturer's inspection and maintenance recommendations, as a minimum, the inspection and maintenance requirement shall:
  - i. monitor and record the secondary voltage and current through the precipitator hourly and calculate 24-hour block daily average. The 24-hour daily average must meet the minimum operating parameters established by Section 2.1 A.1.f above. The daily observation must be made for each day of the calendar year period. The Permittee shall be allowed three (3) days of absent observations per semi-annual period;
  - ii. perform inspections and maintenance of the wet electrostatic precipitator. This inspection must include the following:
    - (A) external visual inspection of critical components of the wet electrostatic precipitator such as voltmeters, quench inlet temperature gauges, outlet temperature gauges, nozzles, pumps, and piping once per calendar month;
    - (B) checks for any equipment that does not generate an alarm when de-energized, to ensure it is operational once per calendar month;
    - (C) checks for signs of plugging in the hopper and gas distribution equipment once per calendar month; and
    - (D) external visual inspection of the system ductwork and material collection unit for leaks and
  - iii. perform an additional inspection for malfunctions and repair as necessary if voltages are less than the minimum value as established in Section 2.1.A.f.

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0515 if the wet electrostatic precipitator is not monitored, inspected and maintained.

#### **Recordkeeping** [15A NCAC 02Q .0508(f)]

- h. The results of inspection and maintenance shall be maintained in a logbook (written or electronic format) on-site and made available to an authorized representative upon request. The logbook shall record the following:
  - i. the date and time of each recorded action;
  - ii. the results of each inspection;
  - iii. the results of any maintenance performed; and
  - iv. any variance from manufacturer's recommendations, if any, and corrections made.

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0515 if these records are not maintained.

# **Reporting** [15A NCAC 02Q .0508(f)]

- i. The Permittee shall submit the results of any maintenance performed any control device within 30 days of a written request by the DAQ.
- j. The Permittee shall submit a summary report of monitoring and recordkeeping activities postmarked on

or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.

#### 2. 15A NCAC 02D .0516: SULFUR DIOXIDE EMISSIONS FROM COMBUSTION SOURCES

a. Emissions of sulfur dioxide from this source (**ID No. ES-DRYER**) shall not exceed 2.3 pounds per million Btu heat input. Sulfur dioxide formed by the combustion of sulfur in fuels, wastes, ores, and other substances shall be included when determining compliance with this standard.

# **Testing** [15A NCAC 02Q .0508(f)]

b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1.A.2.a above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0516.

# Monitoring/Recordkeeping/Reporting [15A NCAC 02Q .0508(f)]

c. No monitoring/recordkeeping/reporting is required for sulfur dioxide emissions from firing wood in this source (**ID No. ES-DRYER**).

### 3. 15A NCAC 02D .0521: CONTROL OF VISIBLE EMISSIONS

a. Visible emissions from these sources (ID Nos. ES-DRYER, ES- DLB, ES-HM-1 through ES-HM-8, ES-NDS, ES-DLC-1, ES-PMFS, ES-PFB, ES-CLR-1 through ES-CLR-6, ES-FPH, ES-PB-1 through ES-PB-12, ES-PL-1 and ES-PL-2) shall not be more than 20 percent opacity when averaged over a six-minute period. However, six-minute averaging periods may exceed 20 percent not more than once in any hour and not more than four times in any 24-hour period. In no event shall the six-minute average exceed 87 percent opacity.

#### **Testing** [15A NCAC 02O .0508(f)]

- b. Under the provisions of NCGS 143-215.108, the Permittee shall demonstrate compliance with the emission limit(s) above by testing the wood fired dryer (ID No. ES-Dryer) controlled by the cyclone (ID No. CD-DC) and the wet electrostatic precipitator (ID No. CD-WESP) for visible emissions in accordance with a testing protocol approved by the DAQ. Details of the emissions testing and reporting requirements can be found in General Condition JJ. This performance test shall be combined with the test required in Section 2.1 A.1.b above. For additional testing and reporting requirements, see Section 2.1 A.1.b If the results of this test are above the limit given in Section 2.1.A.3.a above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0521.
- c. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1.A.3.a above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0521.

# **Monitoring** [15A NCAC 02Q .0508(f)]

d. To ensure compliance, once a month the Permittee shall observe the emission points of these sources (ID Nos. ES-DRYER, ES-DLB, ES-HM-1 through ES-HM-8, ES-NDS, ES-DLC-1, ES-PMFS, ES-PFB-1, ES-CLR1 through ES-CLR6, ES-FPH, ES-PB-1 through PB-12 and ES-PL-1 and ES-PL-2) for any visible emissions above normal. The monthly observation must be made for each month of the calendar year period to ensure compliance with this requirement. The Permittee shall establish "normal" for these sources (ID Nos. ES-DRYER, ES-DLB, ES-HM-1 through ES-HM-8, ES-NDS, ES-DLC-1, ES-PMFS, ES-PFB-1, ES-CLR1 through ES-CLR6, ES-FPH, ES-PB-1 through PB-12 and ES-PL-1 and ES-PL-2) in the first 30 days following the effective date of the permit. If visible emissions from these sources (ID Nos. ES-DRYER, ES-DLB, ES-HM-1 through ES-HM-8, ES-NDS, ES-DLC-1, ES-PMFS, ES-PFB-1, ES-CLR1 through ES-CLR6, ES-FPH, ES-PB-1 through PB-12 and ES-PL-1 and ES-PL-2) are observed to be above normal, the Permittee shall either:

- i. take appropriate action to correct the above-normal emissions as soon as practicable and within the monitoring period and record the action taken as provided in the recordkeeping requirements below, or
- ii. demonstrate that the percent opacity from the emission points of the emission source in accordance with 15A NCAC 02D .2610 (Method 9) for 12 minutes is below the limit given in Section 2.1 A.3. a. above

If the above-normal emissions are not corrected per (i) above or if the demonstration (ii) above cannot be made, the Permittee shall be deemed to be in noncompliance with 15A NCAC 02D .0521.

# **Recordkeeping** [15A NCAC 02Q .0508(f)]

- e. The results of the monitoring shall be maintained in a logbook (written or electronic format) on-site and made available to an authorized representative upon request. The logbook shall record the following:
  - i. the date and time of each recorded action;
  - ii. the results of each observation and/or test noting those sources with emissions that were observed to be in noncompliance along with any corrective actions taken to reduce visible emissions; and
  - iii. the results of any corrective actions performed.

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0521 if these records are not maintained.

# **Reporting** [15A NCAC 02Q .0508(f)]

f. The Permittee shall submit a summary report of the observations postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.

# 2.2 Multiple Emission Source(s) Specific Limitations and Conditions

# A. Facility-wide sources

Regulated Pollutant	Limits/Standards	Applicable Regulation
Volatile organic	Less than 456.4 tons per consecutive 12-month period.	15A NCAC 02Q .0317 for
compounds		avoidance of 15A NCAC 02D
		.0530
Toxic air	Permit limits for toxic air pollutants shall not be	15A NCAC 02D .1100
pollutants	exceeded. State-enforceable only	
Toxic air	Toxic air pollutant emissions shall not exceed the 02Q	15A NCAC 02Q .0711
pollutants	.0711 levels unless ambient standards are not	
	exceeded. State-enforceable only	

### 1. 15A NCAC 02Q .0317: AVOIDANCE CONDITIONS 15A NCAC 02D .0530: PREVENTION OF SIGNIFICANT DETERIORATION

a. In order to avoid applicability of 15A NCAC 02D.0530, as requested by the Permittee, the facility shall discharge into the atmosphere less than 456.4 tons of volatile organic compounds (VOCs) and less than 250 tons of carbon monoxide (CO) each per consecutive 12-month period.

#### **Testing** [15A NCAC 02Q .0508(f)]

b. If the Permittee operates the sources at a higher softwood content than a previously approved percentage by the DAQ as noted in the table in Section 2.2 A.1.d below, a performance test must be conducted to establish a new emission factor to calculate VOC emissions as required in 2.2.A.1.d. Once a monthly

softwood content exceeds the maximum softwood content specified in Section 2.2.A.1.d., the Permittee shall conduct a performance test and submit a written report of the test results within 180 days. Details of the emissions testing and reporting requirements can be found in General Condition JJ. If the results of this test are above the limit given in Section 2.2.A.1.a above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530.

c. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limits given in Section 2.2.A.1.a above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530.

# Monitoring/Recordkeeping [15A NCAC 02Q .0508(f)]

- d. The Permittee shall record and maintain the following records in a logbook (written or electronic format) and make records available to DAQ personnel upon request.
  - i. The oven dried tons of wood pellets produced each month;
  - ii. The facility-wide emissions of VOC's calculated each month. VOC emissions shall be determined by multiplying the following emission factor for the specific sources:

Source	Emission ID	Maximum	VOC Emission
		Softwood Content	Factor
Dryer	ES-Dryer	30%	0.093 lb/ODT
Hammermill	ES-HM-1 through 8	33%	0.457 lb/ODT
Pellet Cooler	ES-CLR-1 through 6	45%	0.784 lb/ODT

If a new emission factor is established by a performance test as required in Section 2.2.A.1.b, the Permittee shall use the factor approved by DAQ's Stationary Source Compliance Branch. Until the new emission factor is approved by DAQ, the Permittee may use a factor estimated by engineering calculation.

- iii. The monthly average softwood content of wood mixture processed in each of the dryer system (**ID No. ES-DRYER**), the hammermills (**ID Nos. ES-HM-1 through ES-HM-8**) and the pellet coolers (**ID Nos. ES-CLR-1 though ES-CLR-6**) shall be equal to or less than the content used for the testing to derive the VOC emission factors except when a new emission factors is pending DAQ's approval as described in Section 2.2.A.1.d.ii above.
- iv. Calculations of CO emissions from the dryer system (**ID No. ES-DRYER**) shall also be made at the end of each month. CO emissions shall be determined by multiplying the approved CO emission factor (0.023 lb/ODT) by the plant process rate.

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530 if the above records are not maintained or the emissions exceed the above limits.

#### **Reporting** [15A NCAC 02Q .0508(f)]

- e. The Permittee shall submit a semi-annual summary report, acceptable to the Regional Air Quality Supervisor, of monitoring and recordkeeping activities postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December, and July 30 of each calendar year for the preceding six-month period between January and June. The report shall contain the following:
  - i. The monthly VOC and CO emissions for the previous 17 months. The emissions must be calculated for each of the 12-month rolling average over the previous 17 months.
  - ii. The monthly softwood content of wood mixture processed in the dryer system (ID No. ES-DRYER), the hammermills (ID Nos. ES-HM-1 through ES-HM-8) and the pellet coolers (ID-Nos. ES-CLR-1 through ES-CLR-6).

#### STATE-ENFORCEABLE ONLY:

# 2. TOXIC AIR POLLUTANT EMISSIONS LIMITATION AND REQUIREMENT

a. Pursuant to 15A NCAC 02D .1100 and in accordance with the approved application for an air toxic compliance demonstration, the following permit limits shall not be exceeded:

EMISSION SOURCE	TOXIC AIR POLLUTANTS	EMISSION LIMITS
Dryer system	Acrolein	2.93 lb/hr
(ID No. ES-DRYER)	Formaldehyde	6.65 lb/hr
Hammermill Filter #1	Acrolein	0.177 lb/hr
	Formaldehyde	0.299 lb/hr
Hammermill Filter #2	Acrolein	0.177 lb/hr
	Formaldehyde	0.299 lb/hr
Hammermill Filter #3	Acrolein	0.118 lb/hr
	Formaldehyde	0.199 lb/hr
Pellet Cooler #1 Aspiration Stack	Acrolein	0.149 lb/hr
	Formaldehyde	0.0945 lb/hr
Pellet Cooler #2 Aspiration Stack	Acrolein	0.149 lb/hr
	Formaldehyde	0.0945 lb/hr
Pellet Cooler #3 Aspiration Stack	Acrolein	0.149 lb/hr
	Formaldehyde	0.0945 lb/hr
Pellet Cooler #4 Aspiration Stack	Acrolein	0.149 lb/hr
	Formaldehyde	0.0945 lb/hr
Pellet Cooler #5 Aspiration Stack	Acrolein	0.149 lb/hr
	Formaldehyde	0.0945 lb/hr
Pellet Cooler #6 Aspiration Stack	Acrolein	0.149 lb/hr
-	Formaldehyde	0.0945 lb/hr
Emergency generator (ID No. IES-GN)	Acrolein	2.27E-04 lb/hr
	Formaldehyde	2.89E-03 lb/hr
Fire water pump (ID No. IES-FWP)	Acrolein	1.94E-04 lb/hr
	Formaldehyde	2.48E-03 lb/hr

#### Testing

b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ.

## Monitoring/Recordkeeping/Reporting

c. To ensure compliance with the above limits, the Permittee shall keep documents on site demonstrating the actual emissions being less than the limits. The supporting documents may be previous permit applications, emissions inventories, previous dispersion modelling analysis or engineering calculations using previous performance test results.

#### STATE-ENFORCEABLE ONLY:

### 3. 15A NCAC 02Q .0711: EMISSSION RATES REQUIRING A PERMIT

- a. The facility shall be operated and maintained in such a manner that any new, existing or increased actual emissions of any Toxic Air Pollutant (TAP) listed in 15A NCAC 02Q .0711 or in this permit from all sources at the facility (excluding those sources exempt under 15A NCAC 02Q .0702 "Exemptions"), including fugitive emissions and emission sources not otherwise required to have a permit, will not exceed its respective TAP permitting emission rates (TPER) listed in 15A NCAC 02Q .0711 without first obtaining an air permit to construct or operate.
- b. PRIOR to exceeding any of the TPERs listed in 15A NCAC 02Q .0711, the Permittee shall be responsible for obtaining an air permit to emit TAPs and for demonstrating compliance with the requirements found in 15A NCAC 02D .1100 "Control of Toxic Air Pollutants."
- c. The Permittee shall maintain at the facility records of operational information sufficient for demonstrating to the Division of Air Quality staff that actual TAPs are less than the rate listed in 15A NCAC 02Q .0711.
- d. The TPER table listed below is provided to assist the Permittee in determining when an air permit is required pursuant to 15A NCAC 02Q .0711 and may not represent all TAPs being emitted from the facility. This table will be updated at such time as the permit is either modified or renewed.

Pollutant (CAS	Carcinogens	<b>Chronic Toxicants</b>	Acute Systemic	Acute Irritants
Number)	(lb/yr)	(lb/day)	Toxicants (lb/hr)	(lb/hr)
1,3-Butadiene (106-99-0)	11			
Acetaldehyde (75-07-0)				6.8
Arsenic and compounds	0.053			
Benzene (71-43-2)	8.1			
Benzo(a)pyrene (50-32-8)	2.2			
Beryllium (7440-41-7)	0.28			
Cadmium (7440-43-9)	0.37			
Carbon tetrachloride	460			
(56-23-5)				
Chlorine (7782-50-5)		0.79		0.23
Chlorobenzene (108-90-7)		46		
Chloroform (67-66-3)	290			
Di(2-ethylhexyl)phthalate		0.63		
(117-81-7)				
Ethylene dichloride (107-06-2)	260			
Hexachlorodibenzo-p-	0.0051			
dioxin (57653-85-7)				
Hydrogen chloride (7647-				0.18
01-0)				
Manganese & compounds		0.63		
Mercury		0.013		
Methyl chloroform		250		
(71-55-6)				
Methyl ethyl ketone		78		
(78-93-3)				
Methyl isobutyl ketone		52		7.6
(108-10-1)				
Methylene chloride	1600		0.39	
(75-09-2)				
Nickel (7440-02-0)		0.13		
Pentachlorophenol		0.063	0.0064	
(87-86-5)				
Perchloroethylene	13000			
(127-18-4)				
Phenol (108-95-2)			0.24	
Polychlorinated biphenyls	5.6			
(1336-36-3)				
Styrene (100-42-5)			2.7	
Tetrachlorodibenzo-p-	0.00020			
dioxin (1746-01-6)				
Trichloroethylene	4000			
(79-01-6)				
Toluene (108-88-3)		98		14.4
Trichlorofluoromethane			140	
(75-01-4)				
Vinyl chloride (75-01-4)	26			
Xylene (1330-20-7)		57		16.4

# **SECTION 3 - GENERAL CONDITIONS (version 5.1 08/03/2017)**

This section describes terms and conditions applicable to this Title V facility.

#### A. General Provisions [NCGS 143-215 and 15A NCAC 02Q .0508(i)(16)]

- 1. Terms not otherwise defined in this permit shall have the meaning assigned to such terms as defined in 15A NCAC 02D and 02Q.
- The terms, conditions, requirements, limitations, and restrictions set forth in this permit are binding and enforceable
  pursuant to NCGS 143-215.114A and 143-215.114B, including assessment of civil and/or criminal penalties. Any
  unauthorized deviation from the conditions of this permit may constitute grounds for revocation and/or enforcement
  action by the DAQ.
- 3. This permit is not a waiver of or approval of any other Department permits that may be required for other aspects of the facility which are not addressed in this permit.
- 4. This permit does not relieve the Permittee from liability for harm or injury to human health or welfare, animal or plant life, or property caused by the construction or operation of this permitted facility, or from penalties therefore, nor does it allow the Permittee to cause pollution in contravention of state laws or rules, unless specifically authorized by an order from the North Carolina Environmental Management Commission.
- 5. Except as identified as state-only requirements in this permit, all terms and conditions contained herein shall be enforceable by the DAQ, the EPA, and citizens of the United States as defined in the Federal Clean Air Act.
- 6. Any stationary source of air pollution shall not be operated, maintained, or modified without the appropriate and valid permits issued by the DAQ, unless the source is exempted by rule. The DAQ may issue a permit only after it receives reasonable assurance that the installation will not cause air pollution in violation of any of the applicable requirements. A permitted installation may only be operated, maintained, constructed, expanded, or modified in a manner that is consistent with the terms of this permit.

#### B. **Permit Availability** [15A NCAC 02Q .0507(k) and .0508(i)(9)(B)]

The Permittee shall have available at the facility a copy of this permit and shall retain for the duration of the permit term one complete copy of the application and any information submitted in support of the application package. The permit and application shall be made available to an authorized representative of Department of Environmental Quality upon request.

#### C. **Severability Clause** [15A NCAC 02Q .0508(i)(2)]

In the event of an administrative challenge to a final and binding permit in which a condition is held to be invalid, the provisions in this permit are severable so that all requirements contained in the permit, except those held to be invalid, shall remain valid and must be complied with.

#### D. **Submissions** [15A NCAC 02Q .0507(e) and 02Q .0508(i)(16)]

Except as otherwise specified herein, two copies of all documents, reports, test data, monitoring data, notifications, request for renewal, and any other information required by this permit shall be submitted to the appropriate Regional Office. Refer to the Regional Office address on the cover page of this permit. For continuous emissions monitoring systems (CEMS) reports, continuous opacity monitoring systems (COMS) reports, quality assurance (QA)/quality control (QC) reports, acid rain CEM certification reports, and NOx budget CEM certification reports, one copy shall be sent to the appropriate Regional Office and one copy shall be sent to:

Supervisor, Stationary Source Compliance North Carolina Division of Air Quality 1641 Mail Service Center Raleigh, NC 27699-1641

All submittals shall include the facility name and Facility ID number (refer to the cover page of this permit).

# E. **Duty to Comply** [15A NCAC 02Q .0508(i)(3)]

The Permittee shall comply with all terms, conditions, requirements, limitations and restrictions set forth in this permit. Noncompliance with any permit condition except conditions identified as state-only requirements constitutes a violation of the Federal Clean Air Act. Noncompliance with any permit condition is grounds for enforcement action, for permit termination, revocation and reissuance, or modification, or for denial of a permit renewal application.

#### F. Circumvention - STATE ENFORCEABLE ONLY

The facility shall be properly operated and maintained at all times in a manner that will effect an overall reduction in air pollution. Unless otherwise specified by this permit, no emission source may be operated without the concurrent operation of its associated air pollution control device(s) and appurtenances.

#### G. Permit Modifications

- 1. Administrative Permit Amendments [15A NCAC 02Q .0514]
  - The Permittee shall submit an application for an administrative permit amendment in accordance with 15A NCAC 02Q .0514.
- Transfer in Ownership or Operation and Application Submittal Content [15A NCAC 02Q .0524 and 02Q .0505]
   The Permittee shall submit an application for an ownership change in accordance with 15A NCAC 02Q.0524 and 02Q .0505.
- 3. Minor Permit Modifications [15A NCAC 02Q .0515]
  - The Permittee shall submit an application for a minor permit modification in accordance with 15A NCAC 02Q .0515.
- 4. Significant Permit Modifications [15A NCAC 02Q .0516]
  - The Permittee shall submit an application for a significant permit modification in accordance with 15A NCAC 02Q .0516.
- 5. Reopening for Cause [15A NCAC 02Q .0517]
  - The Permittee shall submit an application for reopening for cause in accordance with 15A NCAC 02Q .0517.

# H. Changes Not Requiring Permit Modifications

1. Reporting Requirements

Any of the following that would result in new or increased emissions from the emission source(s) listed in Section 1 must be reported to the Regional Supervisor, DAQ:

- a. changes in the information submitted in the application;
- b. changes that modify equipment or processes; or
- c. changes in the quantity or quality of materials processed.

If appropriate, modifications to the permit may then be made by the DAQ to reflect any necessary changes in the permit conditions. In no case are any new or increased emissions allowed that will cause a violation of the emission limitations specified herein.

- 2. Section 502(b)(10) Changes [15A NCAC 02Q .0523(a)]
  - a. "Section 502(b)(10) changes" means changes that contravene an express permit term or condition. Such changes do not include changes that would violate applicable requirements or contravene federally enforceable permit terms and conditions that are monitoring (including test methods), recordkeeping, reporting, or compliance certification requirements.
  - b. The Permittee may make Section 502(b)(10) changes without having the permit revised if:
    - i. the changes are not a modification under Title I of the Federal Clean Air Act;
    - ii. the changes do not cause the allowable emissions under the permit to be exceeded;
    - iii. the Permittee notifies the Director and EPA with written notification at least seven days before the change is made; and
    - iv. the Permittee shall attach the notice to the relevant permit.
  - c. The written notification shall include:
    - i. a description of the change;
    - ii. the date on which the change will occur;
    - iii. any change in emissions; and
    - iv. any permit term or condition that is no longer applicable as a result of the change.
  - Section 502(b)(10) changes shall be made in the permit the next time that the permit is revised or renewed, whichever comes first.
- 3. Off Permit Changes [15A NCAC 02Q .0523(b)]

The Permittee may make changes in the operation or emissions without revising the permit if:

- a. the change affects only insignificant activities and the activities remain insignificant after the change; or
- b. the change is not covered under any applicable requirement.
- 4. Emissions Trading [15A NCAC 02Q .0523(c)]

To the extent that emissions trading is allowed under 15A NCAC 02D, including subsequently adopted maximum achievable control technology standards, emissions trading shall be allowed without permit revision pursuant to 15A NCAC 02Q .0523(c).

I.A Reporting Requirements for Excess Emissions and Permit Deviations [15A NCAC 02D .0535(f) and 02Q .0508(f)(2)] "Excess Emissions" - means an emission rate that exceeds any applicable emission limitation or standard allowed by any rule in Sections .0500, .0900, .1200, or .1400 of Subchapter 02D; or by a permit condition; or that exceeds an emission limit established in a permit issued under 15A NCAC 02Q .0700. (Note: Definitions of excess emissions under 02D .1110 and 02D .1111 shall apply where defined by rule.)

"Deviations" - for the purposes of this condition, any action or condition not in accordance with the terms and conditions of this permit including those attributable to upset conditions as well as excess emissions as defined above lasting less than four hours.

#### **Excess Emissions**

- 1. If a source is required to report excess emissions under NSPS (15A NCAC 02D .0524), NESHAPS (15A NCAC 02D .1110 or .1111), or the operating permit provides for periodic (e.g., quarterly) reporting of excess emissions, reporting shall be performed as prescribed therein.
- If the source is not subject to NSPS (15A NCAC 02D .0524), NESHAPS (15A NCAC 02D .1110 or .1111), or these
  rules do NOT define "excess emissions," the Permittee shall report excess emissions in accordance with 15A NCAC
  02D .0535 as follows:
  - a. Pursuant to 15A NCAC 02D .0535, if excess emissions last for more than four hours resulting from a malfunction, a breakdown of process or control equipment, or any other abnormal condition, the owner or operator shall:
    - i. notify the Regional Supervisor or Director of any such occurrence by 9:00 a.m. Eastern Time of the Division's next business day of becoming aware of the occurrence and provide:
      - name and location of the facility;
      - nature and cause of the malfunction or breakdown;
      - time when the malfunction or breakdown is first observed;
      - expected duration; and
      - estimated rate of emissions;
    - ii. notify the Regional Supervisor or Director immediately when corrective measures have been accomplished; and
    - iii. submit to the Regional Supervisor or Director within 15 days a written report as described in 15A NCAC 02D .0535(f)(3).

#### Permit Deviations

- 3. Pursuant to 15A NCAC 02Q .0508(f)(2), the Permittee shall report deviations from permit requirements (terms and conditions) as follows:
  - a. Notify the Regional Supervisor or Director of all other deviations from permit requirements not covered under 15A NCAC 02D .0535 quarterly. A written report to the Regional Supervisor shall include the probable cause of such deviation and any corrective actions or preventative actions taken. The responsible official shall certify all deviations from permit requirements.

#### I.B Other Requirements under 15A NCAC 02D .0535

The Permittee shall comply with all other applicable requirements contained in 15A NCAC 02D .0535, including 15A NCAC 02D .0535(c) as follows:

- 1. Any excess emissions that do not occur during start-up and shut-down shall be considered a violation of the appropriate rule unless the owner or operator of the sources demonstrates to the Director, that the excess emissions are a result of a malfunction. The Director shall consider, along with any other pertinent information, the criteria contained in 15A NCAC 02D .0535(c)(1) through (7).
- 2. 15A NCAC 02D .0535(g). Excess emissions during start-up and shut-down shall be considered a violation of the appropriate rule if the owner or operator cannot demonstrate that excess emissions are unavoidable.

#### J. Emergency Provisions [40 CFR 70.6(g)]

The Permittee shall be subject to the following provisions with respect to emergencies:

An emergency means any situation arising from sudden and reasonably unforeseeable events beyond the control of the
facility, including acts of God, which situation requires immediate corrective action to restore normal operation, and
that causes the facility to exceed a technology-based emission limitation under the permit, due to unavoidable increases
in emissions attributable to the emergency. An emergency shall not include noncompliance to the extent caused by
improperly designed equipment, lack of preventive maintenance, careless or improper operation, or operator error.

- 2. An emergency constitutes an affirmative defense to an action brought for noncompliance with such technology-based emission limitations if the conditions specified in 3. below are met.
- 3. The affirmative defense of emergency shall be demonstrated through properly signed contemporaneous operating logs or other relevant evidence that include information as follows:
  - a. an emergency occurred and the Permittee can identify the cause(s) of the emergency;
  - b. the permitted facility was at the time being properly operated;
  - c. during the period of the emergency the Permittee took all reasonable steps to minimize levels of emissions that exceeded the standards or other requirements in the permit; and
  - d. the Permittee submitted notice of the emergency to the DAQ within two working days of the time when emission limitations were exceeded due to the emergency. This notice must contain a description of the emergency, steps taken to mitigate emissions, and corrective actions taken.
- 4. In any enforcement proceeding, the Permittee seeking to establish the occurrence of an emergency has the burden of proof.
- 5. This provision is in addition to any emergency or upset provision contained in any applicable requirement specified elsewhere herein.

# K. Permit Renewal [15A NCAC 02Q .0508(e) and 02Q .0513(b)]

This 15A NCAC 02Q .0500 permit is issued for a fixed term not to exceed five years and shall expire at the end of its term. Permit expiration terminates the facility's right to operate unless a complete 15A NCAC 02Q .0500 renewal application is submitted at least nine months before the date of permit expiration. If the Permittee or applicant has complied with 15A NCAC 02Q .0512(b)(1), this 15A NCAC 02Q .0500 permit shall not expire until the renewal permit has been issued or denied. Permit expiration under 15A NCAC 02Q .0400 terminates the facility's right to operate unless a complete 15A NCAC 02Q .0400 renewal application is submitted at least six months before the date of permit expiration for facilities subject to 15A NCAC 02Q .0400 requirements. In either of these events, all terms and conditions of these permits shall remain in effect until the renewal permits have been issued or denied.

## L. Need to Halt or Reduce Activity Not a Defense [15A NCAC 02Q .0508(i)(4)]

It shall not be a defense for a Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

#### M. <u>Duty to Provide Information (submittal of information)</u> [15A NCAC 02Q .0508(i)(9)]

- 1. The Permittee shall furnish to the DAQ, in a timely manner, any reasonable information that the Director may request in **writing** to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit.
- 2. The Permittee shall furnish the DAQ copies of records required to be kept by the permit when such copies are requested by the Director. For information claimed to be confidential, the Permittee may furnish such records directly to the EPA upon request along with a claim of confidentiality.

#### N. **Duty to Supplement** [15A NCAC 02Q .0507(f)]

The Permittee, upon becoming aware that any relevant facts were omitted or incorrect information was submitted in the permit application, shall promptly submit such supplementary facts or corrected information to the DAQ. The Permittee shall also provide additional information as necessary to address any requirement that becomes applicable to the facility after the date a complete permit application was submitted but prior to the release of the draft permit.

#### O. **Retention of Records** [15A NCAC 02Q .0508(f) and 02Q .0508 (l)]

The Permittee shall retain records of all required monitoring data and supporting information for a period of at least five years from the date of the monitoring sample, measurement, report, or application. Supporting information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring information, and copies of all reports required by the permit. These records shall be maintained in a form suitable and readily available for expeditious inspection and review. Any records required by the conditions of this permit shall be kept on site and made available to DAQ personnel for inspection upon request.

# P. Compliance Certification [15A NCAC 02Q .0508(n)]

The Permittee shall submit to the DAQ and the EPA (Air and EPCRA Enforcement Branch, EPA, Region 4, 61 Forsyth Street SW, Atlanta, GA 30303) postmarked on or before March 1 a compliance certification (for the preceding calendar year) by a responsible official with all federally-enforceable terms and conditions in the permit, including emissions limitations, standards, or work practices. It shall be the responsibility of the current owner to submit a compliance

certification for the entire year regardless of who owned the facility during the year. The compliance certification shall comply with additional requirements as may be specified under Sections 114(a)(3) or 504(b) of the Federal Clean Air Act. The compliance certification shall specify:

- 1. the identification of each term or condition of the permit that is the basis of the certification;
- 2. the compliance status (with the terms and conditions of the permit for the period covered by the certification);
- 3. whether compliance was continuous or intermittent; and
- 4. the method(s) used for determining the compliance status of the source during the certification period.

# Q. Certification by Responsible Official [15A NCAC 02Q .0520]

A responsible official shall certify the truth, accuracy, and completeness of any application form, report, or compliance certification required by this permit. All certifications shall state that based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

#### R. Permit Shield for Applicable Requirements [15A NCAC 02Q .0512]

- Compliance with the terms and conditions of this permit shall be deemed compliance with applicable requirements, where such applicable requirements are included and specifically identified in the permit as of the date of permit issuance.
- 2. A permit shield shall not alter or affect:
  - a. the power of the Commission, Secretary of the Department, or Governor under NCGS 143-215.3(a)(12), or EPA under Section 303 of the Federal Clean Air Act;
  - b. the liability of an owner or operator of a facility for any violation of applicable requirements prior to the effective date of the permit or at the time of permit issuance;
  - c. the applicable requirements under Title IV; or
  - d. the ability of the Director or the EPA under Section 114 of the Federal Clean Air Act to obtain information to determine compliance of the facility with its permit.
- 3. A permit shield does not apply to any change made at a facility that does not require a permit or permit revision made under 15A NCAC 02Q .0523.
- 4. A permit shield does not extend to minor permit modifications made under 15A NCAC 02Q .0515.

# S. Termination, Modification, and Revocation of the Permit [15A NCAC 02Q .0519]

The Director may terminate, modify, or revoke and reissue this permit if:

- 1. the information contained in the application or presented in support thereof is determined to be incorrect;
- 2. the conditions under which the permit or permit renewal was granted have changed;
- 3. violations of conditions contained in the permit have occurred;
- 4. the EPA requests that the permit be revoked under 40 CFR 70.7(g) or 70.8(d); or
- 5. the Director finds that termination, modification, or revocation and reissuance of the permit is necessary to carry out the purpose of NCGS Chapter 143, Article 21B.

#### T. Insignificant Activities [15A NCAC 02Q .0503]

Because an emission source or activity is insignificant does not mean that the emission source or activity is exempted from any applicable requirement or that the owner or operator of the source is exempted from demonstrating compliance with any applicable requirement. The Permittee shall have available at the facility at all times and made available to an authorized representative upon request, documentation, including calculations, if necessary, to demonstrate that an emission source or activity is insignificant.

#### U. **Property Rights** [15A NCAC 02Q .0508(i)(8)]

This permit does not convey any property rights in either real or personal property or any exclusive privileges.

#### V. Inspection and Entry [15A NCAC 02Q .0508(l) and NCGS 143-215.3(a)(2)]

- 1. Upon presentation of credentials and other documents as may be required by law, the Permittee shall allow the DAQ, or an authorized representative, to perform the following:
  - a. enter the Permittee's premises where the permitted facility is located or emissions-related activity is conducted, or where records are kept under the conditions of the permit;
  - b. have access to and copy, at reasonable times, any records that are required to be kept under the conditions of the permit;
  - c. inspect at reasonable times and using reasonable safety practices any source, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit; and

d. sample or monitor substances or parameters, using reasonable safety practices, for the purpose of assuring compliance with the permit or applicable requirements at reasonable times.

Nothing in this condition shall limit the ability of the EPA to inspect or enter the premises of the Permittee under Section 114 or other provisions of the Federal Clean Air Act.

2. No person shall refuse entry or access to any authorized representative of the DAQ who requests entry for purposes of inspection, and who presents appropriate credentials, nor shall any person obstruct, hamper, or interfere with any such authorized representative while in the process of carrying out his official duties. Refusal of entry or access may constitute grounds for permit revocation and assessment of civil penalties.

#### W. Annual Fee Payment [15A NCAC 02Q .0508(i)(10)]

- 1. The Permittee shall pay all fees in accordance with 15A NCAC 02Q .0200.
- 2. Payment of fees may be by check or money order made payable to the N.C. Department of Environmental Quality. Annual permit fee payments shall refer to the permit number.
- 3. If, within 30 days after being billed, the Permittee fails to pay an annual fee, the Director may initiate action to terminate the permit under 15A NCAC 02Q .0519.

#### X. Annual Emission Inventory Requirements [15A NCAC 02Q .0207]

The Permittee shall report by **June 30 of each year** the actual emissions of each air pollutant listed in 15A NCAC 02Q .0207(a) from each emission source within the facility during the previous calendar year. The report shall be in or on such form as may be established by the Director. The accuracy of the report shall be certified by a responsible official of the facility.

#### Y. Confidential Information [15A NCAC 02Q .0107 and 02Q. 0508(i)(9)]

Whenever the Permittee submits information under a claim of confidentiality pursuant to 15A NCAC 02Q .0107, the Permittee may also submit a copy of all such information and claim directly to the EPA upon request. All requests for confidentiality must be in accordance with 15A NCAC 02Q .0107.

#### Z. Construction and Operation Permits [15A NCAC 02Q .0100 and .0300]

A construction and operating permit shall be obtained by the Permittee for any proposed new or modified facility or emission source which is not exempted from having a permit prior to the beginning of construction or modification, in accordance with all applicable provisions of 15A NCAC 02Q .0100 and .0300.

#### AA. Standard Application Form and Required Information [15A NCAC 02Q .0505 and .0507]

The Permittee shall submit applications and required information in accordance with the provisions of 15A NCAC 02Q .0505 and .0507.

# BB. Financial Responsibility and Compliance History [15A NCAC 02Q .0507(d)(4)]

The DAQ may require an applicant to submit a statement of financial qualifications and/or a statement of substantial compliance history.

#### CC. Refrigerant Requirements (Stratospheric Ozone and Climate Protection) [15A NCAC 02Q .0501(e)]

- If the Permittee has appliances or refrigeration equipment, including air conditioning equipment, which use Class I or II
  ozone-depleting substances such as chlorofluorocarbons and hydrochlorofluorocarbons listed as refrigerants in 40 CFR
  Part 82 Subpart A Appendices A and B, the Permittee shall service, repair, and maintain such equipment according to
  the work practices, personnel certification requirements, and certified recycling and recovery equipment specified in 40
  CFR Part 82 Subpart F.
- 2. The Permittee shall not knowingly vent or otherwise release any Class I or II substance into the environment during the repair, servicing, maintenance, or disposal of any such device except as provided in 40 CFR Part 82 Subpart F.
- 3. The Permittee shall comply with all reporting and recordkeeping requirements of 40 CFR 82.166. Reports shall be submitted to the EPA or its designee as required.

# DD. <u>Prevention of Accidental Releases - Section 112(r)</u> [15A NCAC 02Q .0508(h)]

If the Permittee is required to develop and register a Risk Management Plan with EPA pursuant to Section 112(r) of the Clean Air Act, then the Permittee is required to register this plan in accordance with 40 CFR Part 68.

# EE. <u>Prevention of Accidental Releases General Duty Clause - Section 112(r)(1)</u> – FEDERALLY-ENFORCEABLE ONLY Although a risk management plan may not be required, if the Permittee produces, processes, handles, or stores any amount of a listed hazardous substance, the Permittee has a general duty to take such steps as are necessary to prevent the accidental release of such substance and to minimize the consequences of any release.

#### FF. Title IV Allowances [15A NCAC 02Q .0508(i)(1)]

This permit does not limit the number of Title IV allowances held by the Permittee, but the Permittee may not use allowances as a defense to noncompliance with any other applicable requirement. The Permittee's emissions may not exceed any allowances that the facility lawfully holds under Title IV of the Federal Clean Air Act.

#### GG. Air Pollution Emergency Episode [15A NCAC 02D .0300]

Should the Director of the DAQ declare an Air Pollution Emergency Episode, the Permittee will be required to operate in accordance with the Permittee's previously approved Emission Reduction Plan or, in the absence of an approved plan, with the appropriate requirements specified in 15A NCAC 02D .0300.

#### HH. Registration of Air Pollution Sources [15A NCAC 02D .0202]

The Director of the DAQ may require the Permittee to register a source of air pollution. If the Permittee is required to register a source of air pollution, this registration and required information will be in accordance with 15A NCAC 02D .0202(b).

# II. Ambient Air Quality Standards [15A NCAC 02D .0501(c)]

In addition to any control or manner of operation necessary to meet emission standards specified in this permit, any source of air pollution shall be operated with such control or in such manner that the source shall not cause the ambient air quality standards in 15A NCAC 02D .0400 to be exceeded at any point beyond the premises on which the source is located. When controls more stringent than named in the applicable emission standards in this permit are required to prevent violation of the ambient air quality standards or are required to create an offset, the permit shall contain a condition requiring these controls.

#### JJ. General Emissions Testing and Reporting Requirements [15A NCAC 02Q .0508(i)(16)]

Emission compliance testing shall be by the procedures of Section .2600, except as may be otherwise required in Rules .0524, .0912, .1110, .1111, or .1415 of Subchapter 02D. If emissions testing is required by this permit or the DAQ or if the Permittee submits emissions testing to the DAQ to demonstrate compliance, the Permittee shall perform such testing in accordance with 15A NCAC 02D .2600 and follow the procedures outlined below:

- 1. The owner or operator of the source shall arrange for air emission testing protocols to be provided to the Director prior to air pollution testing. Testing protocols are not required to be pre-approved by the Director prior to air pollution testing. The Director shall review air emission testing protocols for pre-approval prior to testing if requested by the owner or operator at least **45 days** before conducting the test.
- 2. Any person proposing to conduct an emissions test to demonstrate compliance with an applicable standard shall notify the Director at least **15 days** before beginning the test so that the Director may at his option observe the test.
- 3. The owner or operator of the source shall arrange for controlling and measuring the production rates during the period of air testing. The owner or operator of the source shall ensure that the equipment or process being tested is operated at the production rate that best fulfills the purpose of the test. The individual conducting the emission test shall describe the procedures used to obtain accurate process data and include in the test report the average production rates determined during each testing period.
- 4. Two copies of the final air emission test report shall be submitted to the Director not later than **30 days** after sample collection unless otherwise specified in the specific conditions. The owner or operator may request an extension to submit the final test report. The Director shall approve an extension request if he finds that the extension request is a result of actions beyond the control of the owner or operator.
  - a. The Director shall make the final determination regarding any testing procedure deviation and the validity of the compliance test. The Director may:
    - i. Allow deviations from a method specified under a rule in this Section if the owner or operator of the source being tested demonstrates to the satisfaction of the Director that the specified method is inappropriate for the source being tested.
    - ii. Prescribe alternate test procedures on an individual basis when he finds that the alternative method is necessary to secure more reliable test data.
    - iii. Prescribe or approve methods on an individual basis for sources or pollutants for which no test method is specified in this Section if the methods can be demonstrated to determine compliance of permitted emission sources or pollutants.

b. The Director may authorize the Division of Air Quality to conduct independent tests of any source subject to a rule in this Subchapter to determine the compliance status of that source or to verify any test data submitted relating to that source. Any test conducted by the Division of Air Quality using the appropriate testing procedures described in Section 02D .2600 has precedence over all other tests.

#### KK. Reopening for Cause [15A NCAC 02Q .0517]

- 1. A permit shall be reopened and revised under the following circumstances:
  - a. additional applicable requirements become applicable to a facility with remaining permit term of three or more years;
  - additional requirements (including excess emission requirements) become applicable to a source covered by Title IV:
  - c. the Director or EPA finds that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit; or
  - d. the Director or EPA determines that the permit must be revised or revoked to assure compliance with the applicable requirements.
- 2. Any permit reopening shall be completed or a revised permit issued within 18 months after the applicable requirement is promulgated. No reopening is required if the effective date of the requirement is after the expiration of the permit term unless the term of the permit was extended pursuant to 15A NCAC 02Q .0513(c).
- 3. Except for the state-enforceable only portion of the permit, the procedures set out in 15A NCAC 02Q .0507, .0521, or .0522 shall be followed to reissue the permit. If the State-enforceable only portion of the permit is reopened, the procedures in 15A NCAC 02Q .0300 shall be followed. The proceedings shall affect only those parts of the permit for which cause to reopen exists.
- 4. The Director shall notify the Permittee at least 60 days in advance of the date that the permit is to be reopened, except in cases of imminent threat to public health or safety the notification period may be less than 60 days.
- 5. Within 90 days, or 180 days if the EPA extends the response period, after receiving notification from the EPA that a permit needs to be terminated, modified, or revoked and reissued, the Director shall send to the EPA a proposed determination of termination, modification, or revocation and reissuance, as appropriate.

#### LL. Reporting Requirements for Non-Operating Equipment [15A NCAC 02Q .0508(i)(16)]

The Permittee shall maintain a record of operation for permitted equipment noting whenever the equipment is taken from and placed into operation. When permitted equipment is not in operation, the requirements for testing, monitoring, and recordkeeping are suspended until operation resumes.

# MM. Fugitive Dust Control Requirement [15A NCAC 02D .0540]

As required by 15A NCAC 02D .0540 "Particulates from Fugitive Dust Emission Sources," the Permittee shall not cause or allow fugitive dust emissions to cause or contribute to substantive complaints or excess visible emissions beyond the property boundary. If substantive complaints or excessive fugitive dust emissions from the facility are observed beyond the property boundaries for six minutes in any one hour (using Reference Method 22 in 40 CFR, Appendix A), the owner or operator may be required to submit a fugitive dust plan as described in 02D .0540(f).

"Fugitive dust emissions" means particulate matter from process operations that does not pass through a process stack or vent and that is generated within plant property boundaries from activities such as: unloading and loading areas, process areas, stockpiles, stock pile working, plant parking lots, and plant roads (including access roads and haul roads).

#### NN. Specific Permit Modifications [15A NCAC 02Q .0501 and .0523]

- 1. For modifications made pursuant to 15A NCAC 02Q .0501(c)(2), the Permittee shall file a Title V Air Quality Permit Application for the air emission source(s) and associated air pollution control device(s) on or before 12 months after commencing operation.
- 2. For modifications made pursuant to 15A NCAC 02Q .0501(d)(2), the Permittee shall not begin operation of the air emission source(s) and associated air pollution control device(s) until a Title V Air Quality Permit Application is filed and a construction and operation permit following the procedures of Section .0500 (except for Rule .0504 of this Section) is obtained.
- 3. For modifications made pursuant to 502(b)(10), in accordance with 15A NCAC 02Q .0523(a)(1)(C), the Permittee shall notify the Director and EPA (EPA Air Planning Branch, 61 Forsyth Street SW, Atlanta, GA 30303) in writing at least seven days before the change is made. The written notification shall include:
  - a. a description of the change at the facility;
  - b. the date on which the change will occur;

Permit No. 10203T06 Page 20

- c. any change in emissions; and
- d. any permit term or condition that is no longer applicable as a result of the change.

In addition to this notification requirement, with the next significant modification or Air Quality Permit renewal, the Permittee shall submit a page "E5" of the application forms signed by the responsible official verifying that the application for the 502(b)(10) change/modification, is true, accurate, and complete. Further note that modifications made pursuant to 502(b)(10) do not relieve the Permittee from satisfying preconstruction requirements.

#### OO. Third Party Participation and EPA Review [15A NCAC 02Q .0521, .0522 and .0525(7)]

For permits modifications subject to 45-day review by the federal Environmental Protection Agency (EPA), EPA's decision to not object to the proposed permit is considered final and binding on the EPA and absent a third party petition, the failure to object is the end of EPA's decision-making process with respect to the revisions to the permit. The time period available to submit a public petition pursuant to 15A NCAC 02Q .0518 begins at the end of the 45-day EPA review period.

# ATTACHMENT

#### **List of Acronyms**

AOS Alternate Operating Scenario
BACT Best Available Control Technology

Btu British thermal unit CAA Clean Air Act

CAIR Clean Air Interstate Rule
CEM Continuous Emission Monitor
CFR Code of Federal Regulations
DAQ Division of Air Quality

DEQ Department of Environmental QualityEMC Environmental Management Commission

**EPA** Environmental Protection Agency

**FR** Federal Register

**GACT** Generally Available Control Technology

**HAP** Hazardous Air Pollutant

MACT Maximum Achievable Control Technology

NAA Non-Attainment Area

NCAC North Carolina Administrative Code NCGS North Carolina General Statutes

**NESHAP** National Emission Standards for Hazardous Air Pollutants

**NO**<sub>X</sub> Nitrogen Oxides

NSPS New Source Performance Standard OAH Office of Administrative Hearings

**PM** Particulate Matter

PM<sub>10</sub> Particulate Matter with Nominal Aerodynamic Diameter of 10 Micrometers or Less

**POS** Primary Operating Scenario

PSD Prevention of Significant DeteriorationRACT Reasonably Available Control Technology

SIC Standard Industrial Classification

**SIP** State Implementation Plan

SO<sub>2</sub> Sulfur Dioxide tpy Tons Per Year

**VOC** Volatile Organic Compound